

AMENDMENTS TO THE CLAIMS

1. (currently amended) A radial fan {1} with a housing {2} and a fan impeller {3} disposed therein, an air inlet {4} and an air outlet {5}, a pressure space {6} being formed between the latter, characterised in that wherein in front of the air inlet {4} a laminar element {7} is disposed which, in a bypass {8} formed therein, comprises a sensor {9} for recording at least one parameter of the medium flowing through the air inlet {4}.
2. (currently amended) The radial fan according to Claim 1, characterised in that wherein the laminar element {7} consists of an arrangement of flow channels {10} which are surrounded by an outer cylinder {11}.
3. (currently amended) The radial fan according to Claim 1 or 2, characterised in that wherein the flow channels {10} are formed in one element {12} which is inserted in the outer cylinder {11}, the bypass {8} being formed between the two components.
4. (currently amended) The radial fan according to any of Claims 1 to 3, characterised in that Claim 1, wherein the bypass {8} has an access gap {13} and a discharge gap {14} which are each formed between the element {12} and the outer cylinder {11}.

5. (currently amended) The radial fan according to Claim 4, ~~characterised in that wherein~~ the access gap {13} and the discharge gap {14} are in flow communication with the inflow opening {4'} of the laminar element {7} and the outflow region {29} of the same.

6. (currently amended) The radial fan according to ~~either of Claims 3 or 4, characterised in that Claim 3, wherein~~ behind the access gap {13} the bypass {8} has a settling chamber {15'} for settling the air flow.

7. (currently amended) The radial fan according to ~~either of Claims 5 or 6, characterised in that Claim 5, wherein~~ the sensor {9} is disposed in/on a sensor channel {16} which is in flow communication with a respective settling chamber {15', 15"} by means of an inflow and an outflow opening {17; 18}.

8. (currently amended) The radial fan according to ~~any of Claims 1 to 7, characterised in that Claim 1, wherein~~ an inflow channel {19} for a further medium is formed between the laminar element {7} and the air inlet {4} of the housing {2}.

9. (currently amended) The radial fan according to Claim 8, ~~characterised in that wherein~~ the further medium flows in, evenly distributed over the whole of the air inlet {4}.

10. (currently amended) The radial fan according to ~~any of Claims 1 to 9,~~
~~characterised in that Claim 1, wherein~~ the further medium is supplied via a feed element
(20).

11. (currently amended) The radial fan according to Claim 10, ~~characterised~~
~~in that wherein~~ the feed element (20) has a sensor (21) for the further medium.

12. (currently amended) The radial fan according to Claim 11, ~~characterised~~
~~in that wherein~~ the sensor (21) is disposed in a bypass (22) which has a settling
chamber (23).

13. (currently amended) The radial fan according to Claim 12, ~~characterised~~
~~in that wherein~~ the sensor (21) is disposed in a sensor channel (35) which is in flow
communication with the settling chamber (23) by means of an inflow and an outflow (24,
25).